Researchers who are well versed in developmental neurobiology will find that several of the chapters provide useful reviews of microanatomical changes associated with neuronal maturation. Jones introduces the reader to the notion that diverse synaptic structures viewed by electron microscopy reflect several stages of synaptic development and propagation. The notion that synaptic modifications reflect significant developmental processes is further elaborated in several other chapters. Becker and Jagadha describe dendritic pathology occurring in the context of neurologic disorders such as Pick's disease or the gangliosidoses. Steward and his associates review the role of synaptic remodeling as a response to neuronal injury. Petit nicely places the synaptic alterations associated with early development in the context of synaptic modulation produced by learning and memory formation. Flood and Coleman and deToledo-Morrell and her associates follow synaptic remodeling through aging and dementia.

Several chapters in this book review animal studies of neural grafting. Neural transplantation has recently been introduced as an exciting prospect for the treatment of intractable neuropsychiatric disorders. Although the efficacy of these techniques for patients with Parkinson's disease is still equivocal, Buszaki and Gage discussed their relative success in grafting human fetal hippocampal and cortical tissue into rats. Woodruff and Baisden pointed out that transplanted fetal tissue generally does not develop normally, although electrophysiological and behavioral evidence suggests that the tissue grafts may improve lesion-induced electrophysiological abnormalities and behavioral deficits. The consequence of this abnormal development on behavior is unclear. Hippocampal grafts, for example, would be interesting clinically if they could reverse deficits in short-term memory caused by pathological conditions such as Korsakoff's syndrome; however, earlier animal studies suggested that disordered hippocampal function could be more disorganizing for behavior than complete ablation of this brain region. Also, Buszaki and Gage found that grafted rat hippocampal tissue seemed to be more prone to seizures than native hippocampal tissue. Although many issues concerning neural grafting are unresolved, the chapters addressing these issues are concise and clear and may be useful for psychiatrists, neurologists, and neurosurgeons who wish to become versed in this area.

Neural Plasticity: A Lifespan Approach is not a comprehensive review or a general introduction to this subject for either basic scientists or clinicians. Nevertheless, by "hitting the highlights" of many areas of developmental neurobiology, this book provides both pre-clinical and clinical researchers with focused updates and reviews that are both interesting and helpful in considering the role of neurodevelopment and ongoing neuronal plasticity in the evolution of neuropsychiatric disorders.

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OTOLARYNGOLOGY—HEAD AND NECK SURGERY. 7th Edition. By David D. DeWeese, William H. Saunders, David E. Schuller, and Alexander J. Schleuning II. St. Louis, MO, The C.V. Mosby Company, 1988. 627 pp. No price.

It has now been six years since the sixth edition of DeWeese and Saunders's classic *Textbook of Otolaryngology* appeared in 1982, and over 25 years have passed since the first edition was published. The seventh edition is marked by the addition of two new

authors, David E. Schuller and Alexander J. Schleuning II, chairmen of the Departments of Otolaryngology at Ohio State and Oregon, respectively.

With the addition of these new authors, the organization and scope of this text have changed considerably. The current edition contains 54 chapters and 10 sections. Eight of the sections are organized by anatomic site, with additional sections containing chapters on issues of general import and a section on facial and reconstructive surgery. The sections discussing the anatomic sites contain chapters discussing anatomy and physiology, embryology, diagnostic procedures, and clinical problems related to the site of interest. The section on plastic and reconstructive surgery has been considerably expanded. The initial chapter by Saunders on the physical examination continues to be an excellent guide to the examination of the epithelial surfaces and mucous membranes in the ears, nose, throat, head, and neck.

In addition to the helpful changes in organization, the text has been substantially rewritten with the addition of a considerable number of diagrams and illustrations. The considerable changes in organization and text add to the utility of the book. The current edition of *Otolaryngology—Head and Neck Surgery* remains an excellent and accessible resource for the medical student and non-otolaryngologist, as well as a concise reference for otolaryngology residents and otolaryngologists in practice.

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CLINICAL STUDIES IN MEDICAL BIOCHEMISTRY. Edited by Robert H. Glew and Stephen P. Peters. New York, Oxford University Press, 1987. 259 pp. $18.95.

As man's understanding of various disease processes continues to expand at a tremendous rate, the need for a coherent integration of medical knowledge increases. This integration is particularly necessary for medical students, who frequently feel overwhelmed and dejected as they are presented with large quantities of often discordant information. Understandably, few individuals have attempted the formidable task of integration, and encouragement should be given to those who envisioned and contributed to *Clinical Studies in Medical Biochemistry,* a book whose purpose is to illustrate the basic biochemical principles behind various disease entities presented as clinical cases.

The text is relatively short and is intended as a supplement to the more comprehensive biochemistry textbooks available. As a result, the book's range of topics is limited. It has been somewhat arbitrarily organized into five sections: Protein Structure and Function, Metabolism and Energetics, Synthesis and Catabolism of Complex Molecules, Steroids, and Aspects of Inflammation and Pharmacology. Despite its limited range, this book's intended audience is large, ranging from undergraduate medical students to practicing physicians who express an interest in biochemical pathophysiology. The book uses a case-study format, in which the history, physical findings, and various laboratory data of selected illustrative cases are presented. A section on diagnosis follows, including a discussion of the bases of the various diagnoses. In addition, there are sections on biochemical perspectives and therapy.

As in most books with multiple authors, the quality of each section varies, with the majority being quite good. Nevertheless, one must criticize the book for its widespread use of unexplained medical terminology which easily overwhelms the undergraduate